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a working gas;

a working gas inlet penetrating said [housing] tank below the surface of said liquid metal fuel for dispersing said working gas into said liquid metal fuel wherein heat is transferred to said working gas by direct contact with said liquid metal fuel, said working gas passing through said liquid metal fuel and becoming contaminated with metal vapors from said liquid metal fuel;

an afterburner oxidant injection means, penetrating said [housing] tank above said liquid metal fuel and in communication with said oxidant source, for providing a controlled flow of said oxidant within said [housing] tank above said liquid metal fuel so as to react with said metal vapors to form a solid product therefrom leaving said working gas free of said metal vapors; and

a working gas outlet, penetrating said [housing] tank above said liquid metal fuel, for communicating said heated, metal vapor free, working gas to said Brayton cycle system.

2. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 1 [wherein said

SENSITIVE
INFORMATION

SENSITIVE
INFORMATION

afterburner oxidant injection means] further [comprises]
comprising:

an oxidant sensor, disposed within said working gas outlet,
for measuring the amount of oxidant present in said
outlet;

As [an oxidant afterburner injector, disposed within said
housing above said liquid metal fuel, for supplying an
oxidant within said housing above said liquid metal
fuel;]

an oxidant control valve in communication with said oxidant
afterburner [injector] injection means and with said
oxidant source, said control valve being electrically
controllable to reduce or increase the flow of said
oxidant to said oxidant afterburner [injector]
injection means; and

a valve controller electrically connected to receive
information from said oxidant sensor, said valve
controller being electrically connected to said oxidant
control valve for controlling the flow of oxidant to
said oxidant afterburner [injector] injection means.

SENSITIVE
INFORMATION

SENSITIVE
INFORMATION

3. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 2 [wherein said afterburner oxidant injection means] further [comprises] comprising a temperature sensor disposed within said working gas outlet and for measuring the temperature of the ejected working gas.

4. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 3 wherein said liquid metal fuel comprises an aluminum magnesium alloy.

5. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 4 wherein said oxidant comprises oxygen.

6. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 5 wherein said working gas comprises an inert gas.

7. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 5 wherein said working gas comprises argon.

8. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 5 wherein said working gas comprises a mixture of helium and xenon.

SENSITIVE
INFORMATION

**SENSITIVE
INFORMATION**

9. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 3 wherein said liquid metal fuel comprises an alkali metal.
10. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 9 wherein said oxidant comprises a chlorofluorocarbon.
11. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 10 wherein said working gas comprises an inert gas.
12. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 10 wherein said working gas comprises argon.
13. (amended) A reactor/storage [tank] apparatus for use in a closed Brayton cycle system according to claim 10 wherein said working gas comprises a mixture of helium and xenon.

REMARKS

Claims 1-13 are in the case. Claims 1-13 have been amended. No claims have been allowed. The specification has been amended. No new matter is involved.

Claims 1-13 were rejected under 35 USC § 112, as being vague and confusing, and not describing the claimed invention in such

**SENSITIVE
INFORMATION**